(b) if so, what are the details thereof; and

(c) if not, what are the reasons therefor?

THE MINISTER OF ENERGY WITH ADDITIONAL CHARGE OF THE MINISTRY OF CIVIL AVIATION (SHRI ARIF MOHAMMED KHAN): (a) to (c) Andhra Pradesh State Electricity Board have proposed to set up Kothagudem Thermal Power Scheme Stage-V in the 9th Plan. Since production of coal in Singareni Collieries Company Ltd. has continuously been below target, enough coal may not be available for new power plants. The coal linkage for this scheme will *inter-alia* depend on the availability of coal from SCCL during 9th Plan and the inclusion of the same in the overall priority list of 9th Plan Thermal Power Schemes of the Planning Commission.

Techno-Economic clearance to Pulichinthala Hydro-electric project in Andhra Pradesh

2914. DR. NARREDDY THULASI REDDY: Will the Minister of ENERGY be pleased to state:

(a) whether techno-economic clearance has been given to Pulichinthala Hydro-electric project in Andhra Pradesh;

(b) if so, what are the details thereof; and

(c) if not, what are the reasons therefor?

THE MINISTER OF ENERGY WITH ADDITIONAL CHARGE OF THE MINISTRY OF CIVIL AVIATION (SHRI ARIF MOHD. KHAN): (a) No. Sir.

(b) Does not arise.

(c) The Project Report on Pulichinthala Hydro-electric Project (2X30 MW), Andhra Pradesh was received in the Central Electricity Authority, in June, 1989. Pulichinthala Hydro-electric Project , being a part of a multi-purpose project can be processed through the Central Electricity Authority for techno-economic clearance only after the multi-purpose project is approved by the Technical Advisory Committee of the Ministry of Water Resources.

Development of wind and tidal energy projects

2915. DR. YELAMANCHILI SIVAJI: Will the Minister of ENERGY be pleased to state:

(a) what is the State-wise break-up of the actual investment made so far for development of wind and tidal energy, separately, in the country;

(b) which are the most preferable States for the development of such energy;

(c) whether a large tidal energy project has been taken up in Gujarat with the technical collaboration of an American firm;

(d) if so, what is the present status of the project and what are the reasons for which a place in Gujarat was chosen for this pioneer venture: and

(e) what kind of tides are suitable for the purpose and what other regions of the country have similar ocean tides?

THE MINISTER OF ENERGY WITH ADDITIONAL CHARGE OF THE MINISTRY OF CIVIL AVIATION (SHRI ARIF MOHD. KHAN): (a) The State-wise break-up of the Central expenditure during the 7th Plan on the programme for development of wind energy in the country is given in the enclosed Statement. (*see below*) As regards the tidal power development an expenditure of Rs. 464.49 lakhs has been incurred on the techno-economic feasibility study in the Gulf of Kutch upto March. 1990.

(b) According to the available wind data, the best potential for wind

energy projects is in the States of Gujarat and Tamil Nadu followed by certain parts of Maharashtra, Andhra Pradesh, Karnataka, Orissa, Madhya Pradesh and Rajasthan. For tidal energy development, the economic potential identified so far is largely in the Gulf of Cambay and the Gulf of Kutch on the West Coast in Gujarat.

(c) The proposed tidal power project in the Gulf of Kucth in Gujarat is under investigation. The question of technical collaboration will arise only when it has been cleared for execution.

(d) Investigations and studies to establish techno-economic feasibility of the project are continuing. The site in Gujarat was chosen for detailed investigations and studies as most of the identified economic tidal power potential existed on the West Coast in Gujarat.

(e) With the present technology and on economic considerations, a tidal range of about 5 meters and above is considered suitable for tidal power development. Besides Gulf of Kucth, the other sites identified as worthy of tidal power development in the country are the Gulf of Cambay in Gujarat and the delta of the Ganga in Sunderbans in West Bengal

Statement

State-wise Central expenditure during the 7th Plan on the programme for Wind Energy Development

	State/UT	Amount (Rs. in lakhs)
1	Andhra Pradesh	210
2	Andaman & Nicobar Isands	10
3	Assam	6
4	Bihar	24
5	Delhi	8
6	Goa	2
7	Gujarat	800
8	Himachal Pradesh	27
9	Jammu & Kashmir	26
10	Karnataka	84
11	Kerala	30
12	Lakshadweep Islands	4
13	Madhya Pradesh	76
14	Maharashtra	177
15	Manipur	1
16	Meghalaya	2
17	Orissa	229
18	Rajasthan	48
19	Sikkim	3
20	Tamil Nadu	908
21	Tripura	2
22	Uttar Pradesh	39
23	West Bengal	15
	Total	2731

Say Rs 27.3 crores